

REMARKS

An Excess Claim Fee Payment Letter for an excess independent claim is being filed concurrently herewith.

Claims 1-32 are all the claims presently pending in the application. New independent claim 32 has been added to more completely define the invention.

Claims 1, 11-13, 21-25, 29 and 30 stand rejected on prior art grounds. Applicant gratefully acknowledges the Examiner's indication that claims 26-28 and 31 are allowed and that claims 2-10 and 14-20 would be allowable if rewritten in independent form. Applicant reserves the opportunity to rewrite claims 2-10 and 14-20 later.

With respect to the prior art rejections, claims 1, 11-13, 21-25, 29 and 30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Steiner, et al. ("Graphic StoryWriter: An Interactive Environment for Emergent Storytelling". Conference Proceedings on Human Factors in Computing Systems, 06-1992, Pg. 357-364).

These rejections are respectfully traversed in view of the following discussion.

Attached hereto is a marked-up version of the changes made to the claims by the current Amendment.

It is noted that the claim amendments herein are made only for more particularly pointing out the invention for the Examiner, and not for distinguishing the invention over the prior art, narrowing the claims, or for any statutory requirements of patentability.

It is noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

I. THE CLAIMED INVENTION

Applicant's invention, as disclosed and claimed (e.g., see independent claims 1 and 16), is directed to a computer-implemented method (and system) of automatically generating a story, includes selecting a theme of the story, examining elements of the theme and instantiating the

theme, and using the theme to select and control other aspects of the story, including a plot of said story which employs knowledge-generated characteristics, relationships, and events.

Independent claim 28 is directed to a signal bearing medium incorporating the above method.

With such unique and unobvious features and aspects of the invention, story generation can take place automatically in which a plurality of artifacts are generated in a specified language which humans are likely to find interesting. Further, the story generation is provided by a creative agent which begins with a seed of interestingness and maintains that theme (e.g., anchors the theme) in the generation of skillful variations that are sufficiently distinct from the input.

Thus, the invention is a composite, theme-based story generation system and method. To provide the requisite interestingness, the invention provides a mathematization (e.g., formal representation) of the theme independent of plot, language, and story structure. The invention focuses on the theme (e.g., betrayal, the power of ambition to corrupt the soul, romantic love, etc.) as a critical aspect for providing “interestingness”, and anchors the theme regardless of plot, characters, language, story structure, etc.

By doing so, plot, setting, characters, story structure, language, etc. can be varied while keeping intact/constant the essential element (e.g., theme) which keeps the story interesting and while making the theme permeate the entire story. As such, the theme influences all of the other aspects and processes of the story generation such as setting, characters and their properties, language, story structure, selection of the words, sentences, and paragraphs used in the generation of the language, plot, etc. and these other aspects can be varied while maintaining the theme which keeps the story interesting.

Hence, rather than anchor the story to characters or plot, etc., as in the conventional method/systems, the invention uses the theme and is captured independently to maintain a creative distance between the input and the output and to provide interestingness to the story.

Such features are not taught or suggested by any other prior art of record, either alone or in combination.

II. THE PRIOR ART REJECTION

Steiner et al. discloses a graphic story writer which is an interactive system that enable its users to create structurally complete stories through manipulation of graphic objects in a simulated storybook.

Specifically, a user (typically a child) selects between alternative story settings and proceeds through various screens. Characters and props are initially placed in a staging area of the screen and then dragged and dropped by the user to the illustrated setting. Each movement of the graphical object results in generation of corresponding text at the bottom of the screen. The text generation is based on a story grammar (e.g., see Figure 5 of Steiner). The sequence of text passages generated by successive movements in a session with the GSW constitutes the story produced by the user. The user may be presented with a pop-up menu which allows the user to specify certain attributes of animate characters, as shown in Figure 3 of Steiner. The user terminates a graphical story writer session by selecting "THE END" button.

As is clear, Steiner is far different from the claimed invention, and clearly fails to teach or suggest the same.

That is, Steiner does not teach or suggest "using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events (emphasis Applicant's).

In complete contrast, independent claims 1, 29, and 30, require that using said theme allows for selecting and controlling other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events.

As mentioned in the application (e.g., see pages 7-8), this allows for story generation to take place automatically in which a plurality of artifacts are generated. Thus, a composite, theme-based story generation system and method are provided. The invention focuses on the theme (e.g., betrayal, the power of ambition to corrupt the soul, romantic love, etc.) as a critical

aspect for providing “interestingness”, and anchors the theme regardless of plot, characters, language, story structure, etc.

By doing so, plot, setting, characters, story structure, language, etc. can be varied while keeping intact/constant the essential element (e.g., theme) which keeps the story interesting and while making the theme permeate the entire story. As such, the theme influences all of the other aspects and processes of the story generation such as setting, characters and their properties, language, story structure, selection of the words, sentences, and paragraphs used in the generation of the language, plot, etc. and these other aspects can be varied while maintaining the theme which keeps the story interesting.

Thus, unlike the conventional systems and methods which anchor the story to characters or plot, etc., the invention uses the theme and is captured independently to maintain a creative distance between the input and the output and to provide interestingness to the story.

In view of the foregoing, claims 1, 11-13, 21-25, 29 and 30 are neither anticipated nor, for that matter, rendered obvious by Steiner.

Thus, the claimed invention clearly distinguishes over Steiner, either alone or in combination with any of the other prior art of record.

Turning to the claim language there is no teaching or suggestion of independent claim 1 (or independent claims 29 and 30 which recite similar limitations) which recites “[a] *computer-implemented method of automatically generating a story, comprising:*

selecting a theme of said story;

examining elements of said theme and instantiating said theme; and

using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events (emphasis Applicant’s).

For all of the reasons stated above, the claimed invention is fully patentable over the cited references.

Further, the other prior art of record has been reviewed, but it too even in combination

with Steiner, fails to teach or suggest the claimed invention.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-32, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

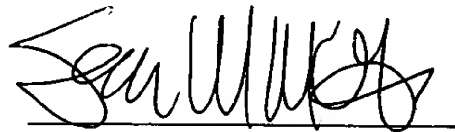
Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date:

7/15/02



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VERSION SHOWING MARKINGS MADE

IN THE CLAIMS:

1. (Amended) A computer-implemented method of automatically generating a story, comprising:
 - selecting a theme of said story;
 - examining elements of said theme and instantiating said theme; and
 - using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events.
10. (Amended) The method according to claim 1, further comprising:
 - generating a story based on an input from [said] a language generator.
15. (Amended) The method according to claim 1, further comprising:
 - identifying various classes of knowledge, a set of computational entities and their interactions for building creative agents for produce random, interesting artifacts in a particular language.
16. (Amended) The method according to claim 1, [wherein said identifying comprises] further comprising:
 - identifying various system components, their roles and interactions in an architecture for computational creativity.
17. (Amended) The method according to claim 1, [wherein said identifying] further comprising:
 - identifying a notion of thematic knowledge and its role in an architecture for

computational creativity.

18. (Amended) The method according to claim 1, [wherein said identifying comprises] further comprising identifying a process of thematic instantiation and its role in an architecture for computational creativity.

19. (Amended) The method according to claim 1, [wherein said identifying comprises] further comprising:

identifying the role of class of knowledge in computational creativity called impressionistic knowledge.

20. (Amended) The method according to claim 1, [wherein said identifying comprises] further comprising:

identifying man-machine interfaces points for controlling a creative process executed by said system.

29 (Amended) A system for generating a story, comprising:

selecting a theme of said story;

examining elements of said theme and instantiating said theme; and

using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events.

30. (Amended) A signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method of story generation, said method comprising:

selecting a theme of said story;

examining elements of said theme and instantiating said theme; and

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using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events.